UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

DEC 30 2011

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

William Ramus
Site Manager
Emerald Performance Materials, LLC
240 West Emerling Avenue
Akron, Ohio 44301

Re: Notice and Finding of Violation
EPA-5-12-OH-04

Dear Mr. Ramus:

The U.S. Environmental Protection Agency is issuing the enclosed Notice and Finding of Violation (NOV/FOV) to Emerald Performance Materials, LLC. (Emerald and/or you) under Section 113(a)(1) of the Clean Air Act, 42 U.S.C. §7413(a)(1). We find that you are violating the National Emission Standards for Hazardous Air Pollutants for Group I Polymers and Resins at 40 C.F.R. Part 63, Subpart U, the National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks, at 40 C.F.R. Part 63, Subpart HH, your Title V Permit No. P0102593 issued by the Ohio Environmental Protection Agency on December 19, 2008 at your Akron, Ohio facility and the Ohio State Implementation Plan.

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order, and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply, and the steps you will take to prevent future violations.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The contact in this matter is Molly DeSalle. You may call her at (312) 353-8773 to request a conference.

You should make the request as soon as possible, but no later than 10 calendar days after you receive this letter. We should hold any conference within 30 calendar days of your receipt of this letter.

Sincerely,

Cheryl L. Newton
Director
Air and Radiation Division

cc: Laura Miracle, Akron Regional Air Quality Management District
Tom Kalman, Ohio Environmental Protection Agency

United States Environmental Protection Agency
Region 5

IN THE MATTER OF:	)	
	)	
Emerald Performance Materials, LLC	)	**NOTICE AND FINDING OF**
Akron, Ohio	)	**VIOLATION**
	)	
Proceedings Pursuant to	)	EPA-5-12-OH-04
the Clean Air Act,	)	
42 U.S.C. §§ 7401 *et seq.*	)	
	)	

NOTICE AND FINDING OF VIOLATION

Emerald Performance Materials, LLC (Emerald or you) owns and operates the facility located at 240 West Emerling Avenue, Akron, Ohio 44301. The U.S. Environmental Protection Agency is sending this Notice and Finding of Violation (NOV/FOV) to you for violations of the National Emission Standards for Hazardous Air Pollutants for Group I Polymers and Resins at 40 C.F.R. Part 63, Subpart U, the National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks, at 40 C.F.R. Part 63, Subpart HH, your Title V Permit No. P0102593 issued by the Ohio Environmental Protection Agency on December 19, 2008, at your Akron, Ohio facility and the Ohio State Implementation Plan. A list and explanation of the violated requirements is provided below. The listed violations constitute violations of the Clean Air Act (the Act).

Section 113 of the Act, 42 U.S.C. § 7413, provides you with the opportunity to request a conference with us to discuss the violations identified in this NOV/FOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for the facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

Explanation of Violations

The following regulatory background, factual background, and violations are relevant to this NOV/FOV:

Regulatory Background

Ohio State Implementation Plan (SIP)

1. Section 110 of the Act, 42 U.S.C. § 7410, requires each State to adopt and submit a plan which provides for the implementation, maintenance, and enforcement of any national primary or secondary standard established pursuant to Section 109 of the Act, 42 U.S.C.

§ 7409. These plans are required to include enforceable emissions limitations, control measure, schedules for compliance, emissions monitoring requirements and permit programs for new and modified sources.

2. 40 C.F.R. § 52.23 provides that failure to comply with any approved regulatory provision of a State Implementation Plan (SIP) or with any permit limitation or condition contained within an operating permit issued under an EPA approved program that is incorporated into the SIP, shall render the person failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement action under Section 113 of the Act.

Title V Requirements

3. EPA promulgated full approval of the Ohio's Title V program on August 15, 1995. 40 C.F.R. Part 70, Appendix A; 60 *Fed. Reg.* 42045. Ohio's Title V program became effective on October 1, 1995. 60 *Fed. Reg.* 42045.

4. The regulation at 40 C.F.R. § 70.6(b)(1) specifies that all terms and conditions in a permit issued under a Part 70 program, including any provisions designed to limit a source's potential to emit, are enforceable by the EPA under the Act.

5. The Ohio regulations governing the Title V permitting program are codified at OAC 3745-77, and are federally enforceable pursuant to Section 113(a)(3).

6. OAC 3745-77-07(A) provides that the Title V permit "shall include emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at time of issuance."

National Emission Standards for Hazardous Air Pollutants (NESHAP)

7. Effective September 5, 1996, EPA promulgated regulations governing the National Emission Standards for Hazardous Air Pollutants for Group I Polymer and Resins in 40 C.F.R. Part 63, Subpart U. *See* 62 Fed. Reg. 46925 (September 5, 1996).

8. Subpart U applies to a group of one or more elastomer product process units (EPPU) and associated equipment, as listed in paragraph § 63.480(a)(4), that is not part of a new affected source, as defined in paragraph § 63.480(a)(3) of this section, that is manufacturing the same primary product and that is located at a plant site that is a major source. 40 C.F.R. § 63.480(a)(2)

9. 40 C.F.R. § 63.2 defines "major source" as, for pollutants other than radionuclides, any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, in the aggregate, 10 tons per year (tpy) or more of any HAP which has been listed pursuant to section 112(b) of the Act, 25 tpy or more of any combination of such hazardous air pollutants, or such lesser quantity as the Administrator may establish by rule.

10. 40 C.F.R. § 63.502 lists the equipment leak and heat exchange system provisions for Subpart U, by stating, "the owner or operator of each affected source, shall comply with the requirements of Subpart H of this part."

11. Effective April 22, 1994, EPA promulgated regulations governing the National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks in 40 C.F.R. Part 63, Subpart H. *See* 59 Fed. Reg. 19568 (April 22, 1994).

12. 440 C.F.R.§ 63.160, Subpart H, sets forth the applicability and designation of sources and states that the Subpart applies to pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, instrumentation systems, and control devices or closed vent systems required by this subpart that are intended to operate in organic hazardous air pollutant service 300 hours or more during the calendar year within a source subject to the provisions of a specific subpart in 40 CFR Part 63 that references this Subpart.

13. 40 C.F.R. § 63.174, Subpart H, lists the standards for connectors in gas/vapor service and in light liquid service, and states that the owner or operator of a process unit subject to this Subpart shall monitor all connectors in gas/vapor and light liquid service.

14. 40 C.F.R. § 63.161 defines connectors to mean flanged, screwed, or other joined fittings used to connect two pipe lines or a pipe line and a piece of equipment. A common connector is a flange. Joined fittings welded completely around the circumference of the interface are not considered connectors for the purpose of this regulation. For the purpose of reporting and recordkeeping, connector means joined fittings that are not inaccessible, glass, or glass-lined as described in 40 C.F.R. § 63.174(h) of this subpart.

15. 40 C.F.R. § 63.174(a)(1) states "connectors shall be monitored to detect leaks by the method specified in §63.180(b) of this subpart."

16. 40 CFR § 63.180(b) states that "Monitoring shall comply with Method 21 of 40 CFR part 60, appendix A."

17. 40 C.F.R. Part 60, Appendix A, Method 21 states that it applies to the determination of volatile organic compound "VOC leaks from process equipment. These sources include, but are not limited to, valves, flanges and other connections, pumps and compressors, pressure relief devices, process drains, opened-ended valves, pumps and compressor seal systems degassing vents, accumulator vessel vents, agitator deals, and access door seals."

18. 40 C.F.R. Part 60, Appendix A, Method 21, § 8.3.1, states that proper execution of Method 21 includes sampling "the interface where leakage is indicated until the maximum meter reading is obtained." Also, "if the maximum observed meter reading is greater than the leak definition in the applicable regulation, record and report the results as specific in the regulation reporting requirements."

19. 40 C.F.R. § 63.180(b)(5) states that the source shall monitor "when the equipment is in organic HAP service, in use with an acceptable surrogate volatile organic compound which is not an organic HAP, or is in use with any other detectable gas or vapor."

20. 40 C.F.R. § 63.174(a)(2) states "if an instrument reading greater than or equal to 500 parts per million is measured, a leak is detected."

21. 40 C.F.R. § 63.181(b)(10) states "For any leaks detected as specified in §§ 63.163 and 63.164; §§ 63.168 and 63.169; and §§ 63.172 through 63.174 of this subpart, a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment."

22. 40 C.F.R. § 63.174(d) states "When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in paragraph (g) of this section and in §63.171 of this subpart. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected."

23. 40 C.F.R. § 63.181(d) requires records of the leak to be maintained for 2 years.

24. 40 C.F.R. § 63.182(d)(2)(ix) states that the periodic report required by 40 C.F.R. § 63.182(a) shall include "the number of connectors for which leaks were detected as described in § 63.174(a) of this Subpart, the percent of connectors leaking, and the total number of connectors monitored."

25. 40 C.F.R. § 63.182(d)(2)(xi) states that the periodic report required by 40 C.F.R. § 63.182(a) shall also include "the number of connectors for which leaks were not repaired as required in § 63.174(d) of this subpart, identifying the number of those that are determined nonrepairable."

26. 40 C.F.R § 63.174(b)(3) states after conducting the initial survey required by § 63.174(b)(1) or § 63.174(b)(2), the owner or operator shall perform all subsequent monitoring of connectors at the frequencies specified in paragraphs § 63.174(b)(3)(i) through (b)(3)(v), except as provided in paragraph § 63.174(c)(2).

27. Section B.4. of the facility's Title V permit identifies specific emissions units subject to 40 C.F.R. Part 63, Subpart U.

Factual Background

28. Emerald owns and operates the facility located at 240 West Emerling Avenue, Akron, Ohio 44301.

29. Emerald manufactures organic chemicals, specifically reactive liquid polymers, latex, and polymer resins.

30. Emerald uses aniline, styrene, and hydrochloric acid, which are all HAPs listed under Section 112(b) of the Act, 42 U.S.C. §7412(b).

31. Emerald is a "major source" for HAP.

32. Emerald owns and operates EPPU's and associated equipment that is collectively considered an affected source under Subpart U.

33. Emerald currently operates its facility under Title V Clean Air Act Permit Program Permit No. P0102593 issued by the Ohio Environmental Protection Agency on December 19, 2008, as required by Title V of the Federal Clean Air Act of 1990.

34. According to Section B, Number 4, of Emerald's Title V Permit, Emerald is subject to 40 C.F.R. Part 63, Subpart U, which became effective final and effective September 5, 1996.

35. On July 12, 2011, Emerald submitted a Subpart U semi-annual periodic report confirming that the facility is applying the Leak, Detection, and Repair (LDAR) program defined in 40 C.F.R. 63, Subpart H.

36. On January 4, 2008, Emerald submitted a semi-annual report. The report detailed the initial survey of connectors at the facility indicated a less than 0.5% leak rate. Under 40 C.F.R. § 63.174(b)(3)(ii), the facility elected to monitor connectors only once every 2 years. The facility monitored in 2001 and 2003 and results indicated less than 0.5% leaking connectors. Based on the results, and under 40 C.F.R. § 63.174(b)(3)(ii), connectors were next monitored in 2007.

37. On January 4, 2008, Emerald submitted a semi-annual report for the time period of May 16, 2007 through November 15, 2007, showing zero detected leaking connectors out of 433 inspected connectors in the Latex area. The report also showed 0 detected leaking connectors out of 68 connectors inspection in the Reactive Liquid Polymer area. All connectors in both areas were inspected resulting in a less than 0.5%, leak rate. The leak rate was reported as 0%.

38. All subsequent semi-annual reports from Emerald show no connectors monitored in 2008, 2009, 2010, or 2011.

39. On September 20, 2011, EPA conducted an unannounced inspection of the facility for compliance with Subpart U, particularly the requirements of the LDAR program and Subpart H.

40. During the inspection, EPA conducted LDAR monitoring per EPA Reference Method 21 in the Reactive Liquid Polymer area.

41. During the inspection, EPA detected 4 leaking connectors out of 373 inspected connectors, a 1.07% leak rate, for the Reactive Liquid Polymer area.

42. Tables A and B show EPA's leak monitoring results during the September 20, 2011 inspection:

Table A –Leak Monitoring Results Conducted by EPA During September 20, 2011 Inspection in the RLP area

Component Type	**Number of Components Monitored**	**Number of Leaks Identified**	**Leak Rate (%)**
Valves	157	2	1.27
Connectors	373	4	1.07

Table B – Leak Rate Details from Leak Monitoring Results Conducted by EPA During September 20, 2011 Inspection in the RLP area

Components	**Identification (Description Give By Emerald)**	**EPA measurement (ppm)**	**Proactive measurement (ppm)**
Connector	Proportioning Tank	1,000	925
Connector	South Spare Reactor drain	>10,000	>2,000
Valve	3-way Valve to Reactor	4,500	8,000
Valve	South Reactor Charge	850	1,000
Connector	Near South Reactor Charge Valve	580	400
Connector	Northeast wet rubber tank	2,200	1,200

43. During the inspection, various technicians at the facility confirmed that when Emerald found leaks during a Method 21 test, the leaks are not tracked or reported in any way at the facility.

44. During the inspection, EPA asked Emerald for leak repair records and received none.

Violations

45. Emerald failed to maintain the periodic reports required by 40 C.F.R. § 63.182(a).

46. Emerald failed to identify connectors with an instrument meter reading greater than 500 parts per million as a detected leak, as required by 40 C.F.R. § 63.174(a)(2).

47. Emerald failed to clearly identify leaking equipment with a tag, as required by 40 C.F.R. § 63.181(b)(10).

48. Emerald failed to maintain the records of repairs and follow-up repairs, required by 40 C.F.R. § 63.174(d), for 2 years, pursuant to 40 C.F.R. § 63.181(d).

12-30-11
Date

for Cheryl L. Newton
Director
Air and Radiation Division

CERTIFICATE OF MAILING

I, Tracy Jamison, certify that I sent a Notice and Finding of Violation, No. EPA-5-12-OH-04, by Certified Mail, Return Receipt Requested, to:

William Ramus
Site Manager
Emerald Performance Materials, LLC
240 West Emerling Avenue
Akron, Ohio 44301

I also certify that I sent copies of the Notice and Finding of Violation by first class mail to:

Laura Miracle
Akron Regional Air Quality Management District
146 South High Street
Suite 904
Akron, Ohio 44308

Tom Kalman
Ohio Environmental Protection Agency
Division Air Pollution Control
P.O. Box 1049
Columbus, Ohio 43216

on this 30 day of December 2011.

Tracy Jamison
Office Automation Assistant
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7673 9078